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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,975	06/19/2005	Adrianus Johannes Stephanes Maria De Vaan	NL021271	8343
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EXAMINER				
NATNAEL, PAULO S M				
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
07/29/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/539,975

**Applicant(s)**

DE VAAN ET AL.

**Examiner**

PAULOS M. NATNAEL

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 11, 14-18, 20, 21 and 24 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 10, 12, 13, 19, 22, 23, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-4,7-8,11,14-17,20-21, 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Hatakeyama et al. U.S. Pat. No. 6,042,236.

Considering claim **1**, Hatakeyama et al. (hereinafter, "Hatakeyama") discloses all claimed subject matter including a projection type video image display device comprising: a light source for emitting a white light in one direction (which corresponds to the claimed a light source (1) for emitting a white light luminous flux in one direction), color light separating means for separating the white light from said light source into three color lights of red light, blue light and green light; modulating means comprising light valves for modulating polarized lights contained in luminous fluxes from said color light separating means, and producing a video image (which corresponds to the claimed modulating means comprising at least one light valve (3R, 3G, 3B) for modulating light contained in said luminous flux and producing a video image); color light combining means for combining the modulated luminous fluxes after being modulated by said modulating means, projection optical means for projecting the combined luminous flux

obtained by said color light combining means on a screen (which corresponds to the claimed and projection optical means (5) for projecting said modulated luminous flux on a screen); a dichroic filter having characteristics for selectively passing and selectively reflecting said color lights from said modulating means disposed between said color light combining means and said modulating means positioned on an optical path of at least one color light of said three color lights of the red light, blue light and green light, (which corresponds to the claimed wherein at least one dichroic filter (10, 10a, 10b, 10e) having characteristics for selectively passing and selectively reflecting any one of the red, blue or green light is arranged at least partially insertable into and retrievable from the optical path of said white light luminous flux). *See, Abstract; col. 1, lines 5-28; col. 3, line 61 through col. 4, line 45; col. 6, line 22-42; col. 10, lines 40-60; and Figs. 1-6.*

Considering claim 2, the claimed

a) color light-separating means (2a, 2b) for separating the white light from said light source into three color lights of red, blue and green light, is met by the "color light separating means for separating the white light from the light source into three color lights of red light, blue light and green light";

b) said modulating means comprising light valves (3R, 3G, 3B) for modulating lights contained in luminous fluxes from said color light-separating means (2a, 2b) and producing a video image, is met by "liquid crystal light valves for modulating the polarized lights contained in the luminous fluxes from the color light separating means";

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c)color light-combining means (4) for combining the modulated luminous fluxes after being modulated by said modulating means, said projection optical means (5) for projecting a combined luminous flux being obtained by said color light combining means (4) on said screen, is met by "color light combining means for combining the modulated luminous fluxes after being modulated by the modulating means, and projection optical means for projecting the combined luminous flux obtained by the color light combining means on a screen." (See, Abstract of Disclosure);

Regarding claim 3, the claimed integrator optics is met by the disclosure that a natural light emitted from a light source 201 passes through an illuminating optical system composed of a first integrator 202a, a reflection mirror 207, and a second integrator 202b, and goes toward a first dichroic mirror 203 which passes blue and reflects green and red. (See, col. 1, 33-37)

As to claim 4, the claimed filter is met by a dichroic filter having characteristics for selectively passing and selectively reflecting said color lights from said modulating means; (see Abstract of disclosure)

As to claims 7 and 8, Hatakeyama discloses that the modulating means comprising light valves for modulating polarized lights contained in luminous fluxes from said color light separating means, and producing a video image. (col. 4, lines 1-4; Figs. 1-7; note the plural in 'valves').

Regarding claim 11, Hatakeyama discloses that the modulating means comprising light valves for modulating polarized lights contained in luminous fluxes from said color light separating means, and producing a video image (col. 4, lines 1-4). Furthermore, col. 7, lines 33-36 discloses that the valve 101 is used at least for two lights: green and red.

As to claim 14, see rejection of claim 1;

Regarding claim 15, see rejection of claim 2;

Regarding claim 16, see rejection of claim 3;

Regarding claim 17, see rejection of claim 4;

As to claims 20 and 21, see rejection of claims 7 and 8;

Considering claim 24, see rejection of claim 11.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama et al. in view of Braumann et al. U.S. 6,486,957  
Hatakeyama teaches dichroic filter having characteristics for selectively passing and selectively reflecting said color lights from said modulating means. See Abstract.

Hatakeyama does not specifically disclose whether or not the filters can be retrievable, replaceable or removable. However, filters that are retrievable, replaceable or removable are notoriously well known in the art of projection displays and other instruments in order to change the wavelength bands of light in the optical path to any desired value or characteristic. Therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Hatakeyama by providing the well known removable or retrievable filters in order to change the wavelength of the light and enable selectively passing and selectively reflecting the lights from the modulating means, as suggested/intended by Hatakeyama.

#### ***Allowable Subject Matter***

5. Claims **6,9,10, 12-13, 19,25,26** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamamoto, U.S. 6,454,440 discloses illumination apparatus and projection type display apparatus using the same

Ouchi et al. U.S. 6,626,540 discloses image display device.

Okamori et al. U. S. 5,808,759 Projection type display including a holographic diffuser.

Ooi et al. U.S. 5,754,260 discloses projection type color liquid crystal optical apparatus.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAULO M. NATNAEL whose telephone number is (571)272-7354. The examiner can normally be reached on 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAULOS M. NATNAEL/  
Primary Examiner, Art Unit 2622

July 16, 2008



